The Comanches

142 [141] are medium in stature. Goldstein reported an average height of five feet, six inches for Comanche men and five feet for women.[4] This makes them slightly taller than their Ute and Shoshone relatives. The men are robust and well proportioned, but the idle and well-fed among them are inclined to be fat and paunchy. Their chests are wide and fairly deep, and they carry themselves erect and with unassuming [145] dignity. Possibly because of their hard life, the women age somewhat prematurely.

The skin color of the Comanche varies from light brown to a reddish brown or copper, depending to some degree on the amount of exposure to weather and sunlight. The females tend toward somewhat lighter pigmentation than do the males. Like that of any Indians, the hair of a Comanche is black and straight and medium in texture. Among the females there is a greater tendency toward coarse- [145] ness. It is a rare Comanche who has cause to worry over baldness or graying in old age. Such facial hair as a Comanche naturally grows is [302] sparse and light, but until recently even this feeble growth had little chance, for it was the style to pluck it out, roots and all—eyebrows included.

On their heavy bodies the average Comanches carry relatively [141] large, round heads with a cephalic index of eighty-three. This gives them a somewhat greater relative head breadth than neighboring Plains tribes and the Shoshones, too. The shift from the Shoshone norm may quite possibly be the result of extensive admixture with Mexican Indian captives. The forehead is broad, and the supraorbital ridges vary from slight among the females to moderate in the cases of males.

Eye color varies from medium brown to black like that of all Mongoloids. The eyes of the children are a much clearer, richer brown than those of adults. The sclera of adults is commonly bloodshot, and, contrary to popular notions about sharp-eyed Indians, the vision ap-

[4] Marcus S. Goldstein, "Anthropometry of the Comanches," *American Journal of Physical Anthropology*, Vol. XIX, (1934–35), 289–313. Goldstein's study is the best account of the physical appearance of the Comanches. It was made in 1931 and comprised thirty-five "unmixed" males, twenty-five "unmixed" females, and twenty-five hybrid individuals representing every surviving important band. The numerical figures and comparisons used in this description are taken from Goldstein's study. Otherwise, the description is based on field notes taken by Ernest Wallace in 1945.

4: Goldstein D-5 (ca. 1930)1934
NO6 Comanche NO6

this study. To Dr. Franz Boas the writer is grateful and wishes to express his thanks here for the opportunity of examining old Comanche data.

AGE

The age distribution of the subjects examined is given below. A disproportionate number of the male full-bloods are in the higher age brackets due to the almost hopeless task of distinguishing full-bloods among the young. As a rule, however, the old men were remarkably well preserved; wherever there was a chance of a physical ailment or decrepitude influencing a measurement or observation, a notation to that effect was made or the item was altogether omitted.

Age distribution

YEARS	FULL-BLOOD		PROBABLE FULL-BLOOD
	Male	Female	Male
	Per cent	*Per cent*	*Per cent*
21 to 30	5.3	4.–	12.5
31 to 40	5.3	16.–	12.5
41 to 50	31.6	24.–	18.8
51 to 60	15.8	36.–	50.–
61 to 70	26.3	20.–	6.2
71 to 80	15.8		
Average	56.8y.	52.–y.	48.4y.
Minimum	26	28	25
Maximum	80[1]	70	61

[1] One man, head measurements only.

DESCRIPTIVE OBSERVATIONS[2]

Color of skin. The most common color of the skin in both sexes was medium- to reddish-brown on the face, and light-brown on the unexposed medial surface of the upper arm. The skin of the females, in general, appeared somewhat lighter in both regions. There was practically no difference between the full- and probable full-bloods.

[2] In the following, the term Comanche and all observations and measurements will refer to the full-bloods only, unless otherwise stated.

4: Goldstein D-5 (ca. 1930)1934
NO6 Comanche NO6

147 *Skin-reaction.* The "reaction of the skin on the chest to the irritation caused by drawing over it a finger-nail with force"[10] was used as an adjunct in distinguishing full- from mixed-bloods. In healthy full-bloods the hyperaemia which constitutes the reaction was often slight, never over medium. At times the hyperaemia did not appear for about a minute after the initial irritation.

142 *Color of eyes.* The predominating eye color in both sexes was a medium brown. Doctor Hrdlička mentions a "moderate [145] dilution or loss of color with age" among the Sioux;[11] this occurs in the Comanche as well. The eyes of the children were generally a richer, deeper brown.

The color of the sclera in the adults was most frequently a dull- or yellowish-white, usually more or less bloodshot. The pigmentation may have been affected by the widespread trachoma.

Eye slant. In one-third of the males and nearly one-half of the females, the eyeslits were practically horizontal. Most of the remaining subjects had their outer canthi inclined upward (slightly to moderately), a few cases only occurring with a downward, slight to moderate, slant. The slant often appeared accentuated by a fairly frequent occurrence of narrow palpebral openings, or, among many with a moderate opening, by a habit of keeping the eyelids half shut. A wide palpebral opening was uncommon.

The mongolian fold was not noted in the adults; it was common in the younger children.

Color of hair. The hair of all full- and probable full-bloods, with one exception, was completely straight. One female's hair was somewhat wavy at the ends, although straight on top of the head. Felt by the fingers, the hair seemed usually of medium texture; a greater tendency toward coarseness occurred in the females than in the males.

[10] Hrdlička, A. Anthropology of the Sioux. Am. J. Phys. Anthrop., XVI, 130, 1931.

[11] Loc. cit., 130.

4: Goldstein D-5 (ca. 1930)1934
NO6 Comanche NO6

Grayness. No gray hair was noted in any full- or probable full-blood below 40 years of age. Among the males, the youngest full-blood showing some gray hairs was 45, probable full-blood, 40; females, full-blood, 40, probable full-blood, 50. Almost 57 per cent of the individuals between 40 and 55, inclusive, had no gray hair at all; this condition is close to the 50 per cent among the Sioux.[12] Many subjects above 55, even at the ages of 70 and 80, showed but few gray hairs, although several cases did occur of approximately two-thirds of the hair gray, as well as one instance of a blind man with practically an entire head of yellowish-gray hair.

The pattern of graying among the Indians, to the writer's knowledge, has not been commented upon. Among whites, even negroes, as recently pointed out by Boas and N. Michelson ('32, p. 215), graying of the hair commonly begins and is most extensive at the temporal regions and around the lower occiput. The writer was struck by the rarity of this gray-hair pattern in the full- and probable full-blood Comanches. Almost invariably the graying in the latter was 'general,' i.e., a condition where more or less widely separated strands of hair, apparently originating around the forehead, had become iron- or yellowish-gray. On the other hand, several instances of compact, temporal graying were noted among the mixed bloods. The 'general' type of graying seemed a distinctly full-blood Indian characteristic.

Loss of hair. No full-blood under 60, and none under 50 among the probable full-bloods, had any loss of hair whatever. Several of the older men had slight to moderate loss over the forehead; three old women likewise showed a slight loss over the forehead.

Moustache and beard. No moustache or beard whatever was noted in either full- or probable full-blood.

Eyebrows. The men often plucked out their eyebrows. Where present, in male or female, the amount of hair in the brow was usually thin, never over medium. A trace of concurrency occurred in 39 per cent of individuals with eyebrows not plucked.

[12] Hrdlička, A. Loc. cit., 132.

5: Carlson & Jones E, N-4, 5 (1933)1939
NO6 Comanche NO6

Comanche and were either eaten fresh or dried in the sun and stored. 824
The dried fruits were dampened, worked into cakes, and baked, 262
fat sometimes being added in the process. Wild currants (*Ribes* 251
odoratum) were eaten fresh, but were not preserved, as they were among many tribes. Another fruit (Comanche: *kusi:poko*) was not seen, but was described as being black, and round, like a grape, and was said to be eaten fresh. Children were reported to be very fond of the sour acid fruits of the sumac (*Rhus glabra*), and various species were eaten by Indians wherever sumac was available.

The berries of the juniper or red cedar (*Juniperus virginiana*) also served as food on occasion, the practice of eating juniper berries of various species being common among the Indians of the Southwest and elsewhere. The Comanche name for the red cedar was given as *ekawa:p*^{v}, and it was explained that *eka* is the term for "red." No etymology of *wa:p* was obtained. To judge from Chamberlain's discussion (6, pp. 63–64), *wap* seems to be a root word for "cedar" in the Shoshonean languages. If this is the case, then the Comanche term *ekawa:p*^{v} is an exact equivalent of the colloquial English term "red cedar" for the same plant.

The succulent fruits of prickly-pear cactus (*Opuntia sp.*) were eaten fresh and were also dried for winter use. No specimens were collected, but the descriptions by informants leave no doubt as to the identity of the plants. The spines were rubbed from the fruits designed for storage, the seeds removed, and the pears dried in the sun. Another cactus, also, was edible, but an informant stated that before eating its fruit one should take the red juice and paint a cross on his forehead to prevent consequent diarrhea. A third cactus (Comanche: *eka mitsa:*) was said to be obtained in Texas, but the notes do not mention whether or not it was a food plant.

The fruits of the southern hackberry (*Celtis laevigata*) were beaten, pits and all, into a pulp and mixed with fat. This mixture was rolled into balls, which were placed on the ends of sticks and roasted over a fire. The Pawnee had a similar method of preparing hackberries, but added parched corn as well as fat (7, p. 76). Hack- 824
berries were commonly eaten by Indians of the Southeast, the Plains, 262
and the Southwest, the usual practice being to consume pit and all. 251
In this connection it is interesting to note that in chemical analyses 145
of hackberries prepared in the Indian manner Yanovsky *et alii* (29) found not only considerable amounts of carbohydrates and protein

5: Carlson & Jones E, N-4, 5 (1933)1939
NO6 Comanche NO6

824 but also a high mineral content. The chief mineral constituent was
262 calcium carbonate, which accounted for about one quarter of the
251 dry weight of the fruits. It seems that the scanty-pulped, unpromis-
145 ing-appearing hackberry may have been a valuable element in the diet of the Indians.

824 The tuberous roots of the Indian potato or *camote de ratón* (*Hoff-*
262 *manseggia Jamesii*) were eaten raw or were boiled. Roots of related species were similarly treated by the Apache and certain Pueblo Indians of the Southwest (3, p. 52; 4, p. 42).

[252] The "roots" of another plant (Comanche; *tun'ha:*) were said to be eaten fresh or after they had been peeled, dried in the sun, and pulverized. The plant, which was described as growing along with the mesquite, was not seen, but the description and the manner of use suggest that it was probably some member of the genus Cymopterus. This opinion is strengthened by the similarity of the Comanche name to the Gosiute term (*tuńa*) for *Cymopterus montanus* (6, p. 96). A single species (*Cymopterus acaulis*) is listed as occurring in Oklahoma (23, p. 373).

[252] Two kinds of "wild onions" were described. A large, sweet-flavored variety (Comanche: *pakø:k*) was prepared by braiding the plants together and roasting over a fire. A smaller onion (Comanche: *t?diekø:k*), with red flowers, was considered less desirable. Wild onions were commonly eaten by various tribes of Indians, and it is not unlikely that both these plants actually belong to the genus Allium. Several species occur in Oklahoma.

Another plant (Comanche: *siko:*) was said to have leaves somewhat like those of a wild onion and to have blue flowers. The "root" (bulb?), which is eaten raw, has a sweet taste. This description strongly suggests the camass or swamp sego (*Camassia esculenta*), an important food plant of the northern Plains and the Plateau regions. The Gosiute name *pa-si-go* (6, p. 30) and the Snake name *paseego* (1, p. 9) are somewhat similar to the *siko:* of the Comanche. The Paiute name (*sego*) and the Gosiute name (*sigo*) (5, p. 498; 6, p. 30) for the Mariposa lily (*Calochortus spp.*) are even more similar to the Comanche term, but A. F. Chamberlain (5, p. 498) points out that the word *sego* in the Paiute language is a general term for bulbous roots. Calochortus, apparently, is eliminated because it does not have a blue flower and does not occur in Oklahoma (23). *Camassia esculenta* fits the description well and is available in Comanche

21: Burnet T-5 (1818-1819) 1954 NO6 Comanche NO6
Texas

Men, whose furrowed [ca. 1818] 175
cheeks and blanched locks palpably indicate what we would 165
call an extreme old age, and who by their own traditionary 887
accounts, have felt the frosts of an hundred winters, will not 145
relinquish the sports of their youth, the hunting of Buffaloes
on horseback. The almost unqualified salubrity of the cli- 175
mate they occupy, certainly has a large share in this unusual 165
prolongation of life and activity. Their being altogether de- [273]
barred, by local remoteness from civilization, from the use
of spirituous liquors, is another prominent reason of their
healthful condition. How happy would it be, for the abused 000
and degraded aborigines of our country, had they all been
equally secluded from access to that baleful poison of the
moral and physical man. Their intercourse with their more
refined and cultivated neighbors, might in that case have
been productive of many benefits to this hapless race, where-
as it has been replete with disaster.

B.

[*The Cincinnati Literary Gazette*, July 3, 1824] 192

A brief desultory and imperfect vocabulary of the Comanche language; respectfully dedicated to Professor Rafinesque of Transylvania University [Lexington, Ky.]

Too-he-whistee—Man	Tu-he-wheete—Red or color'd men
Whiep—Woman	Hanche—Friend
App—Father	Hanche-ka-a—Enemy
Pe a—Mother	Taa-ve—Sun
Too-a—Son	Mu-ur—Moon
Pate—Daughter	So-co-vete—The Earth
Ta-que-ne-whap—Chief captain	Tasheno—Stars
Pe ee sheamp—Private soldier	Kar-me-ad-tasheno—North or not moving star
Tav-e-vo—Spaniard	Tucan—Night
Carno—American	Ta-bane—Day
Inkernish—English	Oot-sa-inte—Winter or cold
Pavom-pete—White man	Urra-inte—Summer or warm